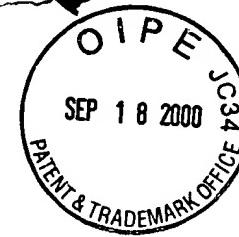


cited in the European Search
Report of EP 99 10 9756.8
Your Ref.: 7027G

(19)



JAPANESE PATENT OFFICE



31 March 1997

PATENT ABSTRACTS OF JAPAN

(11) Publication number: 08298140 A

(43) Date of publication of application: 12 . 11 . 96

(51) Int. Cl

H01M 10/44

H01M 10/48

H02J 7/04

(21) Application number: 07102607

(71) Applicant: TOSHIBA BATTERY CO LTD

(22) Date of filing: 26 . 04 . 95

(72) Inventor: AIZAWA YUKIO

(54) CHARGE CONTROL METHOD FOR
SECONDARY BATTERY

(57) Abstract:

PURPOSE: To always perform charging under a full charge condition, even when a temperature of a secondary battery as a charged unit is lower than a temperature of a charger and of a room and spot of performing charging.

CONSTITUTION: In a charge control method, a secondary battery is quick charged with a fixed current, and by a temperature change (temperature differentiated value) per unit time of a battery

temperature according to advancing of this charge, a full charge is detected to perform stopping or ending the charge. When a charged battery temperature is lower than a peripheral temperature of a charging charger, a preliminary charger is performed by a current of value lower than a fixed current quick charge current, and when a temperature change (temperature differentiated value) per unit time of battery temperature during this preliminary charge is smaller than a preset prescribed value, the charge is transferred to a fixed current quick charge.

COPYRIGHT: (C)1996,JPO

RECEIVED
SEP 22 2000
TECHNOLOGY CENTER 2800